MARKET ANALYSIS:

DISASTER RECOVERY SERVICE

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DISASTER RECOVERY SERVICE

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FEBRUARY 1981

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DISASTER RECOVERY SERVICE

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MARKET ANALYSIS:
DISASTER RECOVERY SERVICE

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1 INTRODUCTION

I INTRODUCTION

A. SCOPE OF THE PROJECT

- The objectives of this project are to:

  - Dimension the market for a Disaster Recovery Service located in Southern California.

  - Determine Litton Mellonic's position in this market.

  - Identify specific prospects for Litton Mellonics' Disaster Recovery Service.

  - Present recommendations and information to assist Litton Mellonics in their entry into this market, in areas relating to:

    . Marketing.

    . Sales.

    . Product.

- Information for this study was obtained from telephone interviews with users of IBM model 3031s, 3032s and 3033s and their equivalents located principally in Southern California, but also in other areas.

  - Interviews conducted outside of Southern California were used to better ascertain and evaluate respondent attitudes, objectives and plans. The data will also be helpful should Litton enter other geographic markets.

- Exhibits I-1 and I-2 show respondent characteristics by industry and location, industry and mainframe size.

B. DEFINITIONS

- For the purposes of this project, the following definitions are used:

  - Disaster: Any event which results in an unexpected computer site shutdown such that processing must be done at another site.

  - Disaster Recovery Plan: A detailed, documented description of all of the resources, procedures and decisions required before, during and after a disaster.

  - Disaster Recovery Service (DRS): A vendor-supplied facility which provides the user with physical access to hardware, software and supplies in the event of a disaster. The vendor is compensated by the user, in advance of a possible disaster, for guaranteeing the availability of such facilities. The two types of Disaster Recovery Service discussed in this reports are "Vendor Hardware" and Vendor Shell" (see definitions below). Using a remote job entry terminal to a vendor facility is not considered to be a Disaster Recovery Service.

EXHIBIT I-1

RESPONDENT PROFILE BY INDUSTRY AND LOCATION

INDUSTRY	S. CAL.	N. CAL.	WASH.-ORE.	ARIZONA	OTHER	TOTAL
DISCRETE MANUFACTURING	11	9	1	1	6	28
SERVICES	8	8	2	–	3	21
BANKING	8	5	1	2	2	18
INSURANCE	9	3	2	–	3	17
GOVERNMENT-STATE AND LOCAL	4	3	3	–	1	11
UTILITIES	5	–	1	1	1	8
EDUCATION	6	1	–	–	–	7
PROCESS MANUFACTURING	4	2	–	–	–	6
GOVERNMENT-FEDERAL	–	4	–	–	1	5
OTHER	1	2	–	1	1	5
RETAIL	3	–	–	–	1	4
TRANSPORTATION	1	–	1	–	1	3
MEDICAL	–	1	–	–	1	2
WHOLESALE	2	–	–	–	–	2
TOTAL NUMBER	62	38	11	5	21	137
TOTAL PERCENT	45%	28%	8%	14%	15%	100%

EXHIBIT I-2

RESPONDENT PROFILE BY
INDUSTRY AND MAINFRAME SIZE

INDUSTRY	3033 EQUIV-ALENT	3032 EQUIV-ALENT	3031 EQUIV-ALENT	TOTAL
DISCRETE MANUFACTURING	21	3	4	28
SERVICES	11	5	5	21
BANKING	14	2	2	18
INSURANCE	9	3	5	17
GOVERNMENT-STATE AND LOCAL	6	1	4	11
UTILITIES	7	1	–	8
EDUCATION	3	3	1	7
PROCESS MANUFACTURING	2	–	4	6
GOVERNMENT-FEDERAL	4	–	1	5
OTHER	4	–	1	5
RETAIL	3	–	1	4
TRANSPORTATION	3	–	–	3
MEDICAL	2	–	–	2
WHOLESALE	2	–	–	2
TOTAL NUMBER	91	18	28	137
TOTAL PERCENT	66%	13%	21%	100%

- Disaster Recovery Facilities: Any alternative which enables a user to do computer processing on short notice at a physical location other than where the workload is normally processed.

  . "Internal Back-up": another site owned by the user's organization. This site can be computer ready space only ("Company Shell") or it can have on-site hardware ("Company Hardware").

  . "Mutual Aid": An informal arrangement, (i.e., no money is exchanged) between two or more firms whereby each agrees to use "best efforts" to provide the other with facilities, if needed. Access to facilities is not guaranteed.

  . "Service Bureau": An arrangement with a computer services vendor to process some or all of the user's workload. Access to the facilities is usually not guaranteed. The vendor does not actively market this type of processing as a Disaster Recovery Service.

  . "Vendor Hardware": A Disaster Recovery Service (DRS) with on-site hardware.

  . "Vendor Shell": A Disaster Recovery Service (DRS) with computer ready space only. No on-site hardware is present.

- Respondents: A term for firms participating in this survey. When the "number of respondents" or "percentage of respondents" is used, this means the calculation is based on the number of answers to that particular question.

- Additional terms in this report are defined in Appendix A.

C. INTERVIEW PROGRAM

- A total of 137 telephone interviews were conducted.
  - One hundred interviews were considered complete interviews.
  - Thirty-seven interviews were terminated after it was determined that the respondent had an internal backup arrangement and no plan to change.
- All interviews were conducted during December 1980 and January 1981.
- Persons interviewed were generally the top computer executive, or the individual most knowledgeable about disaster recovery attitudes and actions within the organization.
- Respondents consistently displayed enthusiasm for discussing disaster recovery and indicated interest in receiving a copy of a summary of the survey which was promised to respondents.
- Interviews averaged about 30 minutes each.
- A copy of the questionnaire is in Appendix E.
- After the midway review presentation on January 6, 1981, the respondent base was enlarged to include users of IBM model 3031s and 3032s, in addition to users of 3033s. Page one of the revised questionnaire is in Appendix F.

II EXECUTIVE SUMMARY

II EXECUTIVE SUMMARY

A. CONCLUSIONS

- The Southern California area will support only one profitable Disaster Recovery Service.
  - Currently, no Disaster Recovery Service vendor has control of the Southern California market.
  - Litton is in a strong position to have the largest share of the Southern California market.
- The current potential annual revenue which could be generated by the guaranteed usage charge for a Disaster Recovery Service site in Southern California (for users with a model 3031 or larger) is estimated at $2.2 million.
  - This estimate is based on 46 users at an annual usage charge of $48,000.
- It will likely take more than one year to sign up 46 customers.
- Most potential users want the Disaster Recovery Service site within 200 miles of their site.
- Solving the prospects' teleprocessing needs is vital to the sales effort.

- Users appeared willing to spend the $48,000 annual charge for guaranteed access.

- Interest is strong in Disaster Recovery among the users of models 3031 and larger.

  - Those companies with the largest computers are the best prospects for a Disaster Recovery Service.

  - Banks, utilities, discrete manufacturers and transportation companies are the most likely industry prospects.

- Current backup arrangments do not correlate with future plans. Those with present internal backup arrangements are still good prospects for a Disaster Recovery Service.

- Vendor awareness comes from a wide variety of sources.

  - Prospect will need education and analytic help to justify the Disaster Recovery Service cost.

  - Although the primary sales effort will be directed at data processing management, top management must also be sold.

- A sales force able to effectively work with both top management and data processing management must be dedicated to the Disaster Recovery sales effort.

- Prospect "hot buttons" in descending order of importance are:

  - Guaranteed access.

  - Teleprocessing facilities.

- Convenient Disaster Recovery Service locations.

- The right price.

- There is some evidence to support the contention that pricing is relatively elastic. This needs to be tested in the marketplace.

  - Any variability in the ultimate service could be put in the context of a tiered pricing structure.

- Sungard is the only viable competitor in Southern California, but has no customers there as yet.

- To be successful in the Disaster Recovery Service market, a vendor must have financial stability, dedication to service, a currently-available facility and commitment to be in the business for the long haul. Prior experience in Disaster Recovery Service is a major plus.

B. RECOMMENDATIONS

- With only a $2 million plus business indicated for the Southern California market, Disaster Recovery Service is not an important business opportunity if confined to that geographic area.

  - Market entry into Southern California should be part of a longer term nationwide business strategy.

- If Litton proceeds to enter the market, it should aggressively and intensely market the service. With room for only one provider in Southern California, attainment of a significant market share early-on is a necessity.

- The sales effort should emphasize Litton's:

- Financial stability.

- Dedication to serving the customer's needs.

- Available facility or definite plans to make one available.

- Long-term commitment to Disaster Recovery.

- Establish a dedicated Disaster Recovery Service sales force capable of selling to both top management and data processing management.

  - INPUT estimates that four people, each of whom would have a $500,000 annual quota will be required.

- Although all 3031 and larger users should be approached, the approach should be made first to:

  - Users of 3033s.

  - Banks, discrete manufacturers, utilities and transportation companies.

- Develop methods of meeting users' TP requirements.

- A balanced promotion effort to include the following items is recommended:

  - Trade journals (case study articles).

  - Seminars.

  - Direct sales approach.

  - Direct mail.

- An independent power system and a halon fire retardant system should be included in the facility.

- Customer office space should be provided as part of the Disaster Recovery Service.

- Since many organizations are not capable of developing a quality disaster recovery plan, Litton should provide this service on a consulting basis.

III ANALYSIS OF THE SURVEY FINDINGS

III ANALYSIS OF THE SURVEY FINDINGS

A. MARKET FORECAST - SOUTHERN CALIFORNIA

- The annual revenue generated by the guaranteed usage charge for a Disaster Recovery Service site in Southern California, for users with a model 3031 or larger is estimated to be $2.2 million.

- The estimate is based on 46 users at an annual usage charge of $48,000.

- Time charges, disaster-generated charges and other charges are not included in the estimate.

B. MARKET FACTORS INFLUENCING THE SIZE OF THE MARKET

1. PROSPECTS - SOUTHERN CALIFORNIA

- About 40% of the Southern California respondents are considering plans for backup arrangements involving using an outside paid service (e.g., vendor hardware, vendor shell and service bureau). See Exhibit III-1.

EXHIBIT III-1

BACKUP PLANS VERSUS PRESENT ARRANGEMENTS
FOR SITES WHICH ARE CONSIDERING A CHANGE
SOUTHERN CALIFORNIA SITES

PRESENT ARRANGEMENT	FUTURE PLAN						
	INTERNAL	VENDOR HARD-WARE	VENDOR SHELL	SERVICE BUREAU	MUTUAL AID	OTHER	TOTAL
NONE	10	4	3	0	2	0	19
INTERNAL BACKUP	0	2	1	1	0	0	4
VENDOR HARDWARE	1	0	0	0	0	0	1
SERVICE BUREAU	0	1	1	0	0	0	2
MUTUAL AID AGREEMENT	0	5	2	3	0	1	11
OTHER	0	1	1	0	0	2	4
TOTAL NUMBER	11	13	8	4	2	3	41
TOTAL PERCENT	27%	32%	19%	10%	5%	7%	100%

62 RESPONDENTS (21 WITHOUT ARRANGEMENT CHANGES)

INPUT

- With 87 sites (Model 3031s or larger) in Southern California, the gross number of prospects locally is 35, as shown in Exhibit III-2.

2. PROSPECTS - NORTHERN CALIFORNIA

- Exhibit III-2 shows 58 Northern California sites.

- Exhibit III-3 shows that more than half of the respondents require their Disaster Recovery Service site to be within 200 miles of their own site of operations. The balance are willing to go beyond 200 miles. About a third are willing to go 400 miles.

- Thirty-seven percent of the respondents are the presently considering an outside service, as shown in Exhibit III-4.

- Based on this data, INPUT estimates that the potential Northern California market is six sites.

3. PROSPECTS - BALANCE OF THE U.S.

- Exhibit III-3 shows that nearly one quarter of the users are willing to have their Disaster Recovery Service site located over 1,000 miles away.

- Of the 1,063 total potential sites outside of California, INPUT estimates that 90 sites would be candidates for a Disaster Recovery Service situated in Southern California.

- Because of the presence of Disaster Recovery Service sites operating in other locations throughout the U.S., and competitive pressures from other firms, INPUT estimates that Litton Mellonics should consider only 15% (or 13) of the non-California market available to its Southern California Disaster Recovery Service.

EXHIBIT III-2

MODEL 3031, 3032, 3033, AND EQUIVALENT
COMPUTER SITES BY LOCATION

LOCATION	IBM* 3033	IBM* 3031, 3032	TOTAL
SOUTHERN CALIFORNIA	52	37	89
NORTHERN CALIFORNIA	30	26	56
BALANCE OF UNITED STATES	623	440	1,063
TOTAL	705	503	1,208

*IBM OR EQUIVALENT

EXHIBIT III-3

MINIMUM AND MAXIMUM DISTANCE REQUIRED BY
RESPONDENT FROM USER SITE TO DISASTER RECOVERY SERVICE SITE

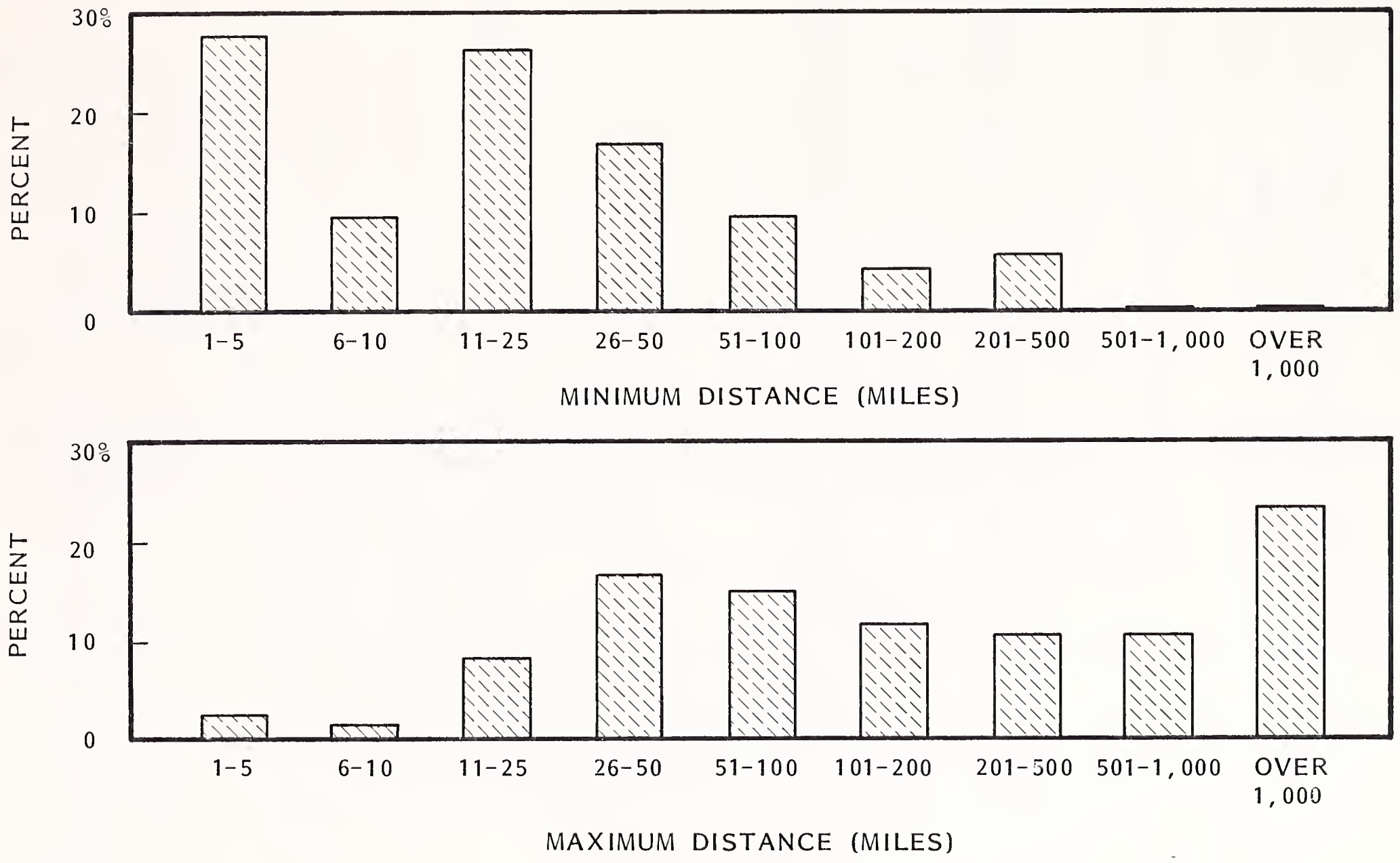


EXHIBIT III-4

BACKUP PLAN VERSUS PRESENT ARRANGEMENTS FOR SITES
WHICH INTEND TO CHANGE -
ALL RESPONDENTS

PRESENT ARRANGEMENT	FUTURE PLAN						
	INTERNAL	VENDOR HARD-WARE	VENDOR SHELL	SERVICE BUREAU	MUTUAL AID	OTHER	TOTAL
NONE	18	8	10	0	10	0	46
INTERNAL BACKUP	1	6	2	1	0	0	10
VENDOR HARDWARE	1	0	0	0	0	0	1
VENDOR SHELL	0	1	0	1	0	0	2
SERVICE BUREAU	0	2	1	1	0	1	5
MUTUAL AID AGREEMENT	3	6	3	7	1	3	23
OTHER	0	1	1	0	0	2	4
TOTAL NUMBER	23	24	17	10	11	6	91
TOTAL PERCENT	25%	26%	19%	11%	12%	7%	100%

137 RESPONDENTS (46 WITHOUT ARRANGEMENT CHANGES)

4. THE TELEPROCESSING (TP) FACTOR

- Exhibit III-5 shows the importance of TP to any Disaster Recovery plan. Ninety-five percent of the respondents depend on TP for at least some of their processing needs.

- Two-thirds said 4800 baud service would be adequate for emergency use.

- Exhibit III-6 indicates that for those respondents considering the vendor hardware alternative, 10 out of 24 said replacing their TP arrangement at a Disaster Recovery Service site would not be practical and nine out of 24 said 4800 baud would not be adequate for emergency use.

- INPUT believes that 15% of the prospects for Disaster Recovery Service will not be able to use an outside service because of technical limitations.

5. REVENUE PER CLIENT

- Respondents were asked what they were willing to spend per year to guarantee the availability of a disaster recovery facility. Exhibit III-7 gives the results.

- The average limit of those respondents giving an answer was $54,000.

- Those planning to use service bureaus had an average reply of $44,000, not far from Litton's annual charge of $48,000.

- The average reply of those respondents planning/considering vendor hardware, vendor shell or service bureaus was $62,000.

6. FACTORS INFLUENCING GROWTH

- As shown in Exhibit III-8, there is increased emphasis on Disaster Recovery Service.

EXHIBIT III-5

RESPONDENTS' NEEDS IN TELEPROCESSING

NEEDS	PERCENT	
	YES	NO
DEPEND ON TELEPROCESSING? (99)	95%	5%
REPLICATING EXISTING TELE-PROCESSING PRACTICAL? (93)	45	55
4800 BAUD SERVICE ADEQUATE FOR EMERGENCY USE? (88)	66	34

	COUNT
REQUIRE 9600 BAUD	20
REQUIRE 56000 BAUD	4

(NUMBER OF RESPONDENTS)

INF

EXHIBIT III-6

TELEPROCESSING NEEDS VERSUS BACKUP PLANNED

BACKUP ARRANGEMENT PLANNED	DEPEND ON TELEPROCESSING			REPLICATE TELE-PROCESSING PRACTICAL?			4800 BAUD ADEQUATE?		
	COUNT	YES	NO	COUNT	YES	NO	COUNT	YES	NO
MULTIPLE SITES	16	15	1	15	5	10	14	12	2
VENDOR HARDWARE	24	22	2	23	13	10	20	11	9
VENDOR SHELL	17	17	-	17	10	7	15	10	5
SERVICE BUREAU	9	9	-	9	5	4	8	6	2
MUTUAL AID AGREEMENT	10	10	-	10	5	5	6	4	2
OTHER	6	6	-	6	4	2	6	5	1
TOTAL	82	79	3	80	42	38	69	48	21

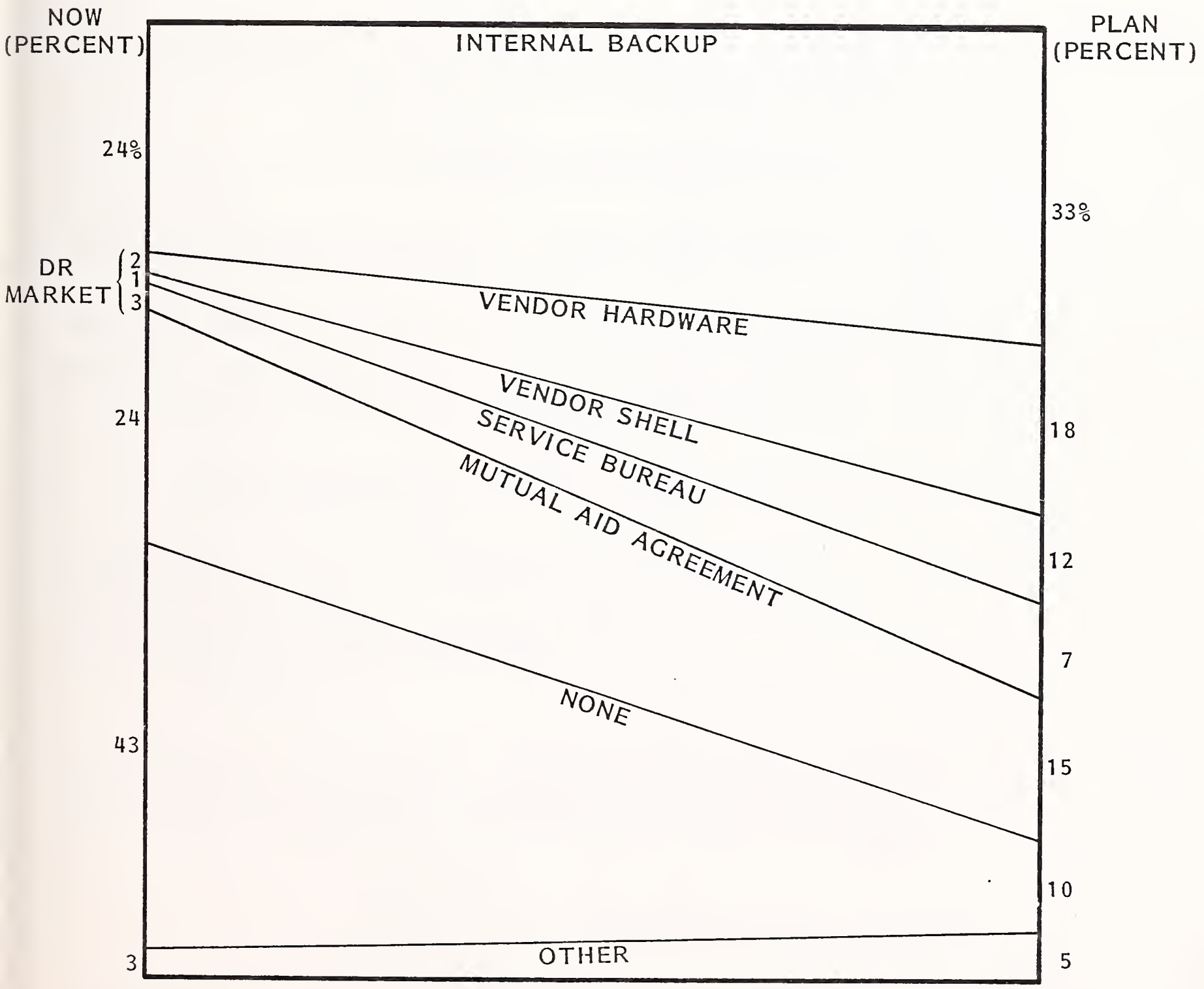
EXHIBIT III-7

AMOUNT WILLING TO SPEND FOR GUARANTEED ACCESS
VERSUS BACKUP ARRANGEMENT PLANNED

BACKUP ARRANGEMENT PLANNED	($ THOUSAND)		
	COUNT	AVERAGE	NO ANSWER
INTERNAL BACKUP	11	$72,000	11
VENDOR HARDWARE	13	82,000	11
VENDOR SHELL	11	50,000	6
SERVICE BUREAU	8	44,000	1
MUTUAL AID AGREEMENT	7	36,000	4
OTHER	4	81,000	2
TOTAL	54	-	35

EXHIBIT III-8

TRENDS IN BACKUP ARRANGEMENTS



- Thirty-three percent of users who have no backup today are planning one.

- Today, only 3% have an outside Disaster Recovery Service. Thirty percent plan to have one.

• There are a variety of significant forces stimulating the Disaster Recovery Service market.

- Organizations are increasing their reliance upon the computer to peform functions citical to their daily operations.

  . "The computer is our cash register."

  . "I'll sleep better at night,...with a backup arrangement in place."

  . When respondents were asked what force initiated their considering Disaster Recovery Service, the answer..."We need it"...was given more than any other as shown in Exhibit III-9.

- Respondents are not satisfied with their present arrangement.

  . When asked, "How satisfied are you with your current (backup) arrangement?" (rated 1-10 with 10 high), the average response was 4, with 59% of the respondents replying 4 or less, as shown in Exhibit III-10.

- Internal auditors and government regulators will encourage and/or require that management demonstrate a viable computer backup capability.

7. SUMMARY - MARKET ESTIMATE

• The gross prospects available for a Southern Calfornia Disaster Recovery Service site are, by main site location:

EXHIBIT III-9

WHY NEW BACKUP ARRANGEMENTS ARE BEING CONSIDERED

REASONS WHY	COUNT	PERCENT
NEED	58	46.4%
AUDITORS-INTERNAL	19	15.2
GOVERNMENT REGULATORS	10	8.0
INDUSTRY TREND	8	6.4
AUDITORS-EXTERNAL	7	5.6
FINANCIAL IMPACT OF DISASTER	7	5.6
CUSTOMERS-INTERNAL USERS	5	4.0
PRESS COVERAGE	4	3.2
CUSTOMERS-EXTERNAL	2	1.6
EXPERIENCED DISASTER FIRST HAND	2	1.6
LEGAL LIABILITY BOARD	2	1.6
SEMINAR	1	0.8
TOTAL	125	100.0%

EXHIBIT III-10

RESPONDENTS' SATISFACTION WITH
THEIR CURRENT BACKUP ARRANGEMENT

	COUNT	AVERAGE	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10
SATISFACTION DISTRIBUTION	90	4.0	32	21	19	11	7

RATED ON A SCALE OF 1-10, WITH 10 MOST SATISFIED.

.	Southern California	35
.	Northern California	6
.	Balance of U.S.	13
	Total	54

- The TP factor will reduce this by 15%, leaving a prospect base in 1981 of 46.

C. COMPETITION

- From the response to the question, "What vendors did/would you consider to provide a Disaster Recovery Service?", Sungard emerges as the front runner, as shown in Exhibit III-11.

- All potential user recognition of Litton Mellonics was from respondents located in Southern California.

- A significant number of respondents are aware some Disaster Recovery Service vendors exist, but can't remember their names. Appendix C lists comments made by respondents about various Disaster Recovery Service vendors.

- What do potential Disaster Recovery Service users want in a vendor? The answers are shown in Exhibit III-12.

  - Financial stability.

  - Dedication to service.

  - Currently available facility.

  - Commitment to disaster recovery.

EXHIBIT III-11

RESPONDENTS' RESPONSE TO QUESTION, "WHAT VENDOR DID/WOULD YOU CONSIDER TO PROVIDE A DISASTER RECOVERY SERVICE?"

VENDOR	ALL CASES CONSIDER		SOUTHERN CALIFORNIA CONSIDER	
	COUNT	PERCENT	COUNT	PERCENT
SUNGARD	29	28.2%	13	25.0%
KNOWS, CAN'T REMEMBER NAME	24	23.3	13	25.0
DATA PROCESSING SECURITY	13	12.6	6	11.5
LITTON MELLONICS	9	8.7	9	17.3
COM DISCO	8	7.8	3	5.8
MARTIN MARIETTA	6	5.8	3	5.8
ADP	2	1.9	1	1.9
UNIGARD	2	1.9	1	1.9
BOEING COMPUTER SERVICES	1	1.0	0	.0
CULLINANE	1	1.0	0	.0
IBM	1	1.0	1	1.9
KAISER ENGINEERS	1	1.0	0	.0
MATTEL	1	1.0	1	1.9
McDONNELL DOUGLAS	1	1.0	0	.0
OSI	1	1.0	0	.0
RECOVERY OPERATION CENTER	1	1.0	1	1.9
SAFE	1	1.0	0	.0
TELMOD	1	1.0	0	.0
TOTAL	103	100.0%	52	100.0%

EXHIBIT III-12

RESPONDENTS' RANKING OF
DESIRABLE CHARACTERISTICS
IN DISASTER RECOVERY SERVICE VENDORS

CHARACTERISTIC	RANKING*
FINANCIAL STABILITY (87)	8.4
DEDICATED TO SERVICE (85)	8.4
CURRENTLY AVAILABLE FACILITIES (83)	7.8
COMMITMENT TO DISASTER RECOVERY SERVICE (85)	7.6
EXPERIENCE IN DISASTER RECOVERY SERVICE (84)	7.3
PRICE (84)	7.0
LOCATION (87)	6.6
EXISTENCE OF DEMO FACILITY (83)	6.5
OTHER (11)	9.0

*RANKING 1-10, WITH 10 MOST IMPORTANT

(NUMBER OF RESPONDENTS)

- Experience in disaster recovery.

- A review of the key factors in determining customer preference indicates Litton could be the major competitor in the Southern California market.

D. THE MARKETING APPROACH - WHO TO SELL TO FIRST

- Since there are 87 sites in Southern California with Model 3031s or larger, and Litton envisions a Disaster Recovery Service servicing 40 to 80 users, all potential users must be approached.

- An analysis is presented to indicate who to approach first, as the most promising prospects by:

  - Mainframe size.

  - Industry.

  - Current backup arrangement.

1. MAINFRAME SIZE

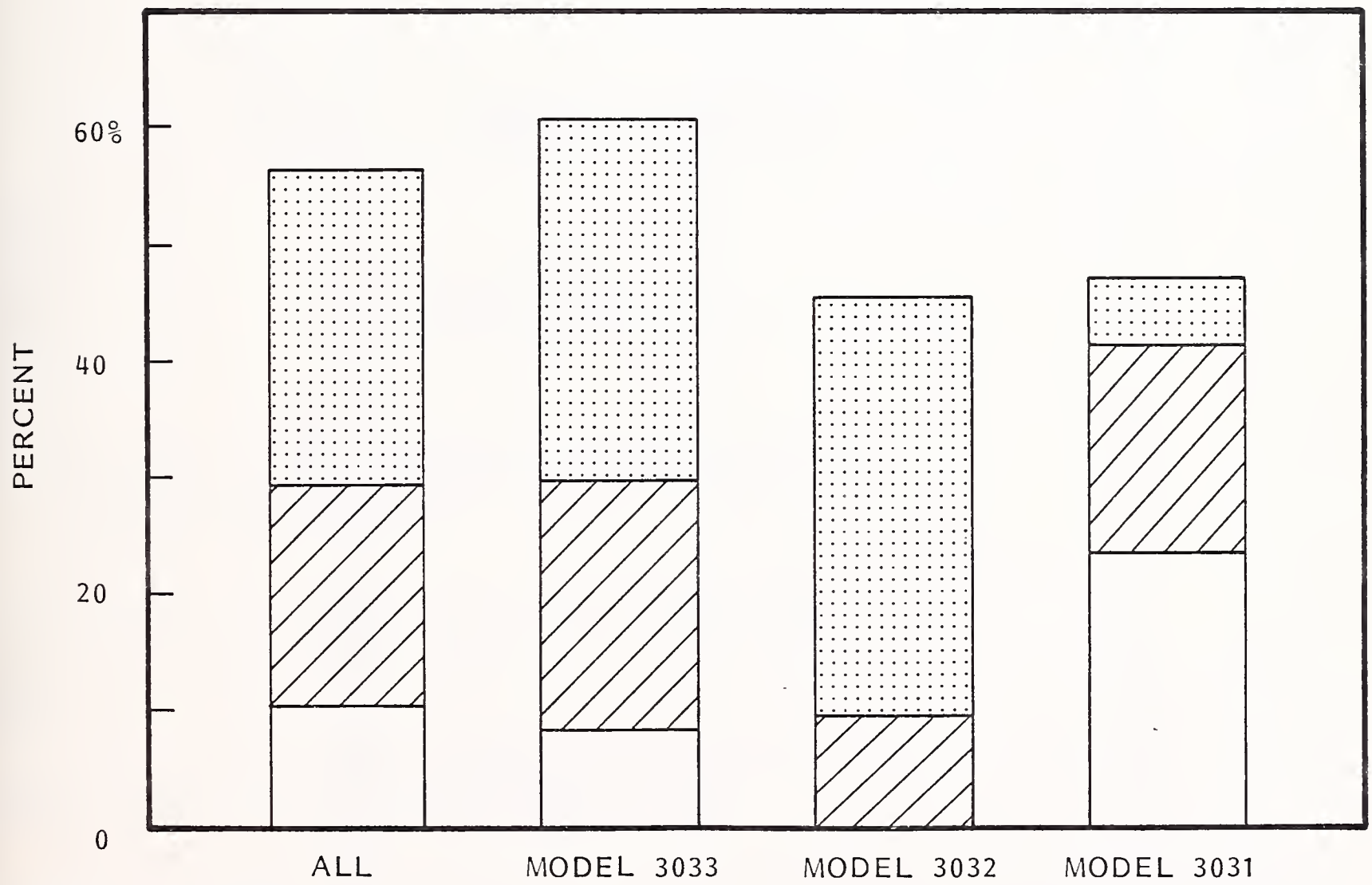
- Exhibit III-13 shows that the larger the biggest mainframe is at a site, the more likely the site's plans involve a more expensive arrangement with a service company.

2. INDUSTRY

- Because of the limited sampling, it is not possible to draw definitive conclusions about all industries. Survey results, however, are given in Exhibit III-14.

EXHIBIT III-13

PLANS OF RESPONDENTS TO CONSIDER VENDOR HARDWARE/
SHELL/SERVICE BUREAU BY SIZE OF MAINFRAME



	ALL	MODEL 3033	MODEL 3032	MODEL 3031
NUMBER OF CASES WITH PLANS	89	61	11	17
TOTAL NUMBER OF CASES	140	94	18	28

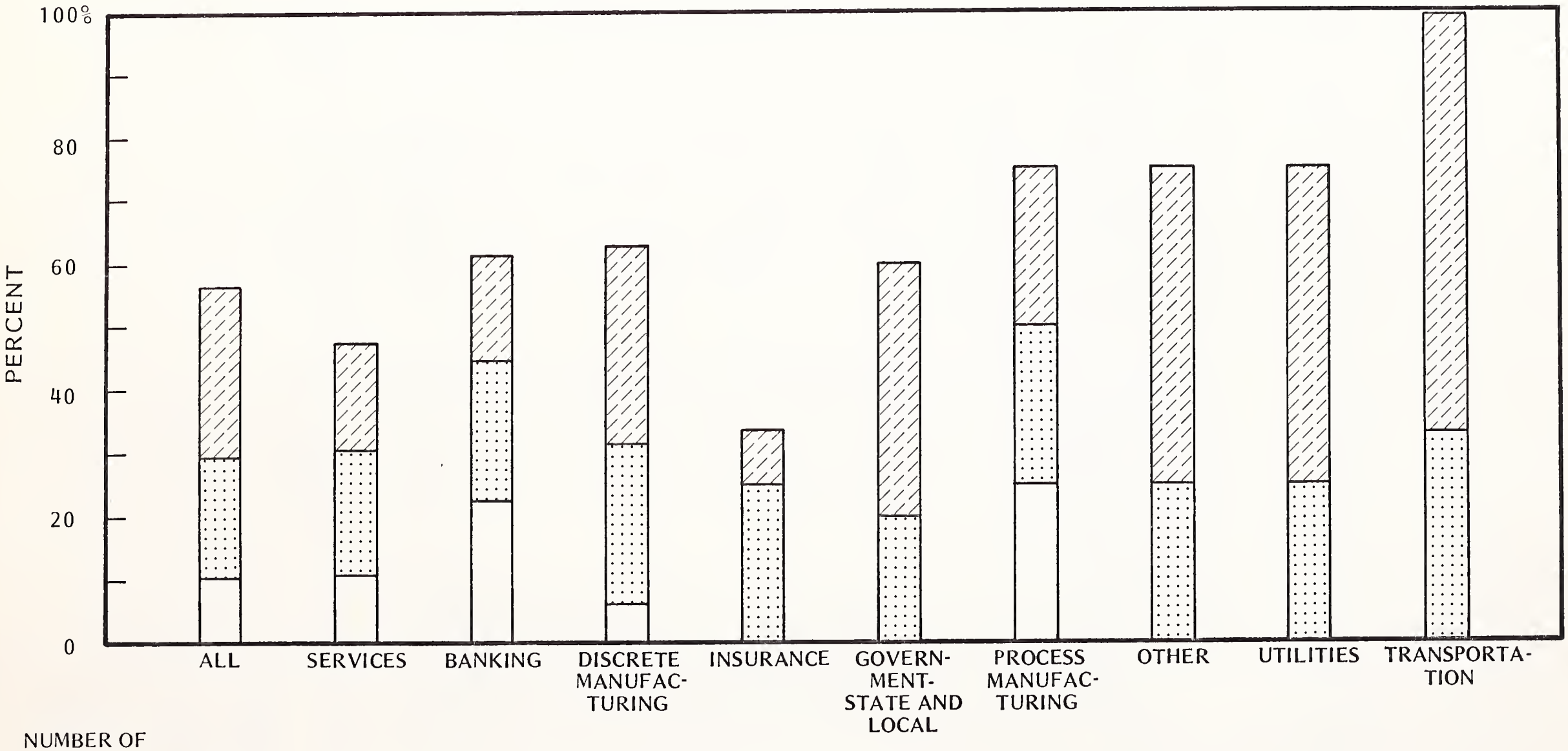
VENDOR HARDWARE

VENDOR SHELL

SERVICE BUREAU

EXHIBIT III-14

PLANS OF RESPONDENTS TO CONSIDER VENDOR HARDWARE/
VENDOR SHELL/SERVICE BUREAU BY INDUSTRY



	ALL	SERVICES	BANKING	DISCRETE MANUFAC-TURING	INSURANCE	GOVERN-MENT-STATE AND LOCAL	PROCESS MANUFAC-TURING	OTHER	UTILITIES	TRANSPORTA-TION
NUMBER OF RESPONDENT PLANS	89	19	18	16	12	5	4	4	4	3
NUMBER OF RESPONDENTS	140	22	19	28	17	11	6	5	8	3

▨ VENDOR HARDWARE ▩ VENDOR SHELL □ SERVICE BUREAU

- Seventeen out of 18 banking respondents plan to upgrade their current arrangement. Government regulations play a key part in this.

- All major transportation companies plan vendor hardware or vendor shell arrangements.

- Exhibit III-15 shows the average amount respondents stated they are willing to spend annually for guaranteed access. Banks, utilities and discrete manufacturers are the leading sectors.

3. PRESENT ARRANGEMENT

- Exhibit III-16 shows respondents' plans to consider various backup arrangements in relationship to their current backup arrangement.

  - Those considering vendor hardware came from <u>all</u> backgrounds.

  - There is no clear relationship between a user's current arrangement and any planned future arrangement.

E. SALES STRATEGY

1. SECURING LEADS

- Exhibit III-17 indicates where respondents learned about other Disaster Recovery Service vendors.

- A balanced sales approach seems to be called for. The following all produced customer awareness.

  - Trade journals.

EXHIBIT III-15

AMOUNT RESPONDENTS ARE WILLING TO SPEND
ANNUALLY TO GUARANTEE ACCESS BY INDUSTRY

INDUSTRY	AMOUNT
EDUCATION (1)	$100,000
OTHER (1)	100,000
BANKING (8)	78,000
UTILITIES (4)	67,000
FEDERAL GOVERNMENT (1)	60,000
DISCRETE MANUFACTURING (10)	55,000
PROCESS MANUFACTURING (3)	34,000
RETAIL (1)	34,000
INSURANCE (5)	30,000
WHOLESALE (1)	10,000

(NUMBER OF RESPONDENTS)

EXHIBIT III-16

PLANS OF RESPONDENTS TO CONSIDER
VENDOR HARDWARE/SHELL/SERVICE BUREAU
COMPARED TO THEIR PRESENT BACKUP ARRANGEMENT

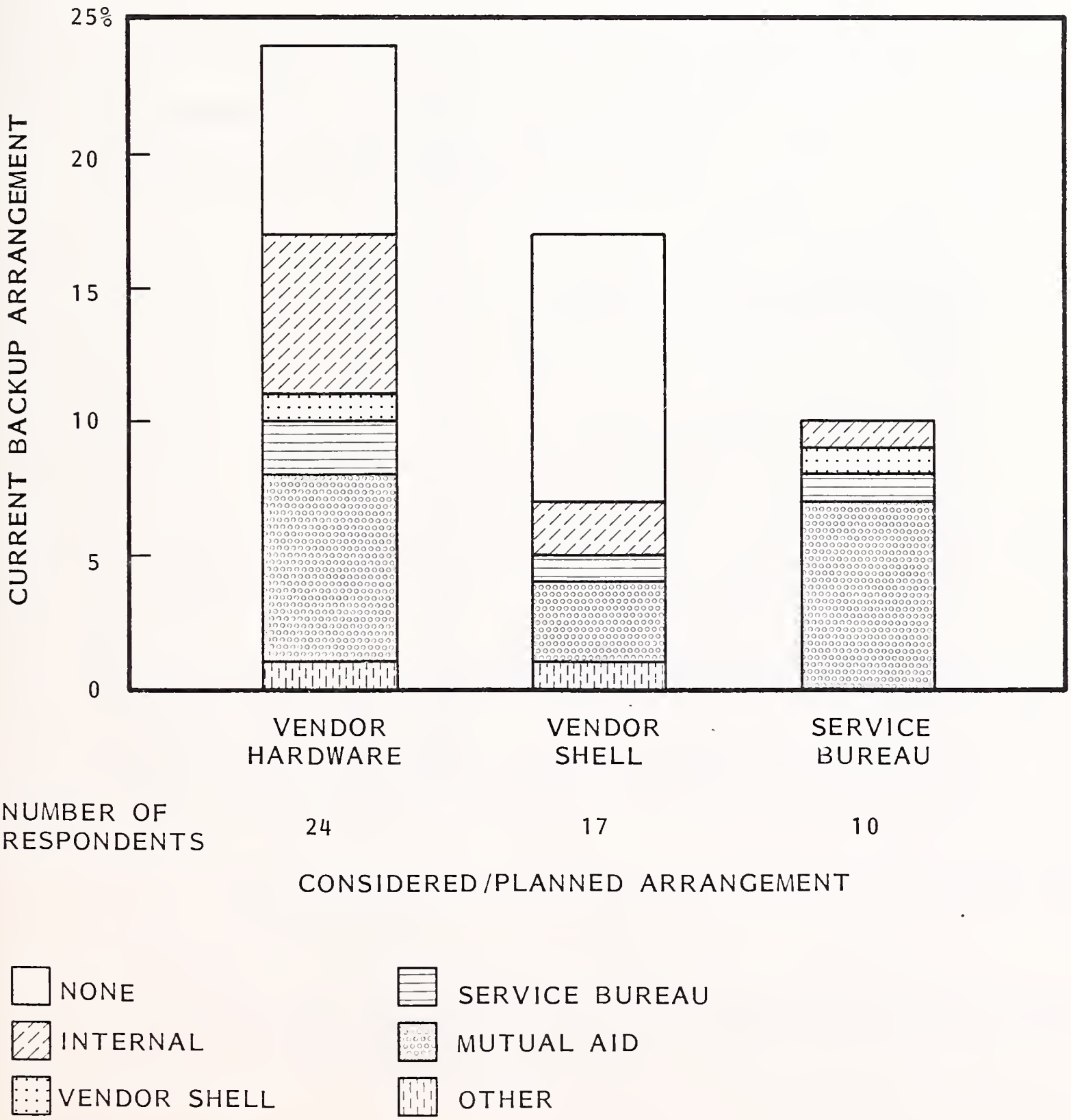


EXHIBIT III-17

WHERE RESPONDENTS LEARNED ABOUT
DISASTER RECOVERY SERVICE VENDORS

	COUNT	PERCENT
TRADE JOURNALS	19	20.4%
SEMINARS	16	17.2
APPROACHED US	14	15.1
ADS	12	12.9
MAILINGS	11	11.8
PREVIOUS BUSINESS WITH	8	8.6
INTERCOMPANY RECOMMENDATION	4	4.3
USER GROUP	4	4.3
CONSULTANT	2	2.2
SPECIAL INTEREST GROUP	2	2.2
INTRACOMPANY RECOMMENDATION	1	1.1
TOTAL	93	100.0%

- Seminars.

- Direct sales approach.

- Advertisements.

- Direct mail.

2. TIMING/INTENSITY OF SALES EFFORT

- Some respondents indicated they expect to consider and make their backup arrangement changes fairly quickly, while others either would or could not give a time estimate. Exhibit III-18 shows the respondents timing for a change to a Disaster Recovery Service.

- With most of the respondents who gave an estimate indicating a relatively quick decision, an immediate, intense sales effort is recommended.

3. PROSPECT AWARENESS/KNOWLEDGE/ATTITUDES TOWARD DISASTER RECOVERY

- Respondents were very interested in the disaster recovery topic. Very few prospective interview subjects were unwilling to grant an interview.

- On a subjective basis, INPUT's interviewers rated the "sophistication" of the respondents regarding Disaster Recovery. On a scale of 1-10 with 10 high, the average rating was 6.6. The "sophistication index" was 7.1 for those companies with Disaster Recovery plans and 5.9 for those without plans.

  - Some of the people in very responsible positions were ignorant about disaster recovery.

- Thirty-one percent of the respondents whose companies had disaster recovery plans did not think their plan would work.

EXHIBIT III-18

RESPONSE TO QUESTION - "HOW MUCH TIME ELAPSED/WILL ELAPSE BETWEEN THE INITIAL DECISION TO CONSIDER A DISASTER RECOVERY SERVICE SYSTEM AND THE POINT OF SIGNING UP?"

TIME	PERCENT
1-6 MONTHS (14)	16%
7-12 MONTHS (12)	13
13-24 MONTHS (4)	5
NO TIME ESTIMATE (59)	66

- Exhibit III-19 lists the disaster respondents mentioned as potentially requiring a disaster recovery arrangement. The leading disasters are:
  - Fire.
  - Earthquake.
  - Sabotage.
  - Flood.
- As might be expected, earthquake was of most concern in Southern California, and of little concern east of the West Coast.

4. SALES TARGETS WITHIN COMPANIES

- Respondents were asked:
  - Why disaster recovery is of interest?
  - Who initiated the interest?
  - Who will evaluate disaster recovery resources?
  - Who will make the decision on disaster recovery resources?
- Exhibits III-9, III-20, III-21 and III-22 summarize the responses.
- Interest in disaster recovery is initiated primarily because of "need," implying that data processing management sees the importance of its operation on a continuing basis.
- Internal auditors and government regulations are the two major forces outside of the data processing organization initiating interest in disaster recovery.

EXHIBIT III-19

RESPONDENTS' CONCERN FOR DISASTERS IN TERMS OF NEED FOR A DISASTER RECOVERY SERVICE SYSTEM

DIASTER	PERCENT OF MENTIONS
FIRE	36%
EARTHQUAKE	26
SABOTAGE	12
FLOOD	10
PLANE	5
OTHER	4
BROWN OUT	3
EXPLOSION	2
VANDALISM	1
TORNADO	1
COMPUTER FAILURE	-
HURRICANE	-
NUCLEAR EVENT	-
TOTAL	100%

EXHIBIT III-20

WHO INITIATED INTEREST IN DISASTER RECOVERY SERVICE?

WHO DOES IT	INITIATED	
	COUNT	PERCENT
DATA PROCESSING MANAGER	31	21%
DIRECTOR OF MIS	20	14
OTHER	20	14
OPERATIONS MANAGER	14	10
AUDITORS-INTERNAL	11	7
PRESIDENT	8	5
DATA PROCESSING SECURITY MANAGER	6	4
SENIOR VICE PRESIDENT	6	4
VICE PRESIDENT PLANNING AND CONTROL	5	4
AUDIT COMMITTEE	4	3
AUDITORS-EXTERNAL	4	3
BOARD OF DIRECTORS	4	3
FACILITIES MANAGER	4	3
VICE PRESIDENT FINANCE	3	2
GOVERNMENT REGULATORS	2	1
CHAIRMAN OF THE BOARD	1	1
CUSTOMERS-INTERNAL	1	1
TOTAL	144	100%

EXHIBIT III-21

WHO EVALUATES DISASTER RECOVERY SERVICE ALTERNATIVES

WHO DOES IT	EVALUATION	
	COUNT	PERCENT
DATA PROCESSING MANAGER	35	24
OTHER	26	17
DIRECTOR OF MIS	20	14
OPERATIONS MANAGER	20	14
DATA PROCESSING SECURITY MANAGER	13	9
FACILITIES MANAGER	5	3
SENIOR VICE PRESIDENT	5	3
VICE PRESIDENT FINANCE	5	3
PRESIDENT	4	3
VICE PRESIDENT PLANNING AND CONTROL	4	3
AUDITORS-INTERNAL	3	2
ASSISTANT DATA PROCESSING MANAGER	2	1
AUDIT COMMITTEE	3	1
AUDITORS-EXTERNAL	1	1
CUSTOMERS-INTERNAL	1	1
GENERAL MANAGER	1	1
TOTAL	148	100%

EXHIBIT III-22

WHO DECIDES ON DISASTER RECOVERY SERVICE ARRANGEMENTS

WHO DOES IT	DECISION	
	COUNT	PERCENT
OTHER	26	17
PRESIDENT	23	15
DIRECTOR OF MIS	22	14
SENIOR VICE PRESIDENT	20	13
VICE PRESIDENT FINANCE	17	11
VICE PRESIDENT PLANNING AND CONTROL	17	11
DATA PROCESSING MANAGER	13	8
BOARD OF DIRECTORS	4	3
DATA PROCESSING SECURITY MANAGER	4	3
OPERATIONS MANAGER	4	3
AUDITORS-INTERNAL	2	1
FACILITIES MANAGER	2	1
TOTAL	154	100%

- Evaluation of disaster recovery resources is done primarily by the data processing organization.

- The decision to commit to a specific disaster recovery arrangement is shared by data processing management and senior management.

  - Some respondents mentioned their concern for the lack of Disaster Recovery resources in the company and management's disinclination to spend the necessary money.

  - A Disaster Recovery Service must be sold to top management, in addition to the data processing organization.

F. PRODUCT STRATEGY

- Exhibit III-23 lists the respondents' ratings of factors pertaining to a Disaster Recovery Service.

  - Guaranteed access is clearly the most important factor a Disaster Recovery Service offers.

  - Teleprocessing capability is also of vital importance.

    . Exhibit III-5 shows that 95% of the respondents depend on teleprocessing, and 55% of them do not believe that replicating their TP arrangement would be practical because of the high cost.

    . Sixty-five percent of those requiring TP indicated 4800 baud service would be adequate in an emergency.

INF

EXHIBIT III-23

RESPONDENTS' RATING OF FACTORS IMPORTANT TO A DISASTER RECOVERY SERVICE

FACTOR	RATING*
GUARANTEED ACCESS (90)	8.9
TELEPROCESSING AT DISASTER RECOVERY SITE (90)	7.9
PRICE (87)	6.9
INDEPENDENT POWER SYSTEM (83)	6.4
HALON FIRE RETARDENT SYSTEM (86)	5.8
OFFICE SPACE AVAILABLE (86)	5.5
CONSULTING PROVIDED (82)	5.2

*RATED ON A SCALE OF 1-10, WITH 10 MOST IMPORTANT

(NUMBER OF RESPONDENTS)

- Exhibit III-6 points out a significant problem in selling a Disaster Recovery Service. Of the 24 respondents considering a vendor hardware Disaster Recovery Service, 10 state their TP facility cannot be replicated practically, and 9 out of 24 stated that 4800 baud service is not adequate in an emergency.

- Even though some users are considering vendor hardware as their backup arrangement, they may not be able to use this because of the lack of the necessary TP capability.

- An independent power system, a halon fire retardent system and office space seem important but not of primary importance.

- Consulting in Disaster Recovery may be helpful in some sales situations where the customer does not have the resources or capability to plan for it themselves.

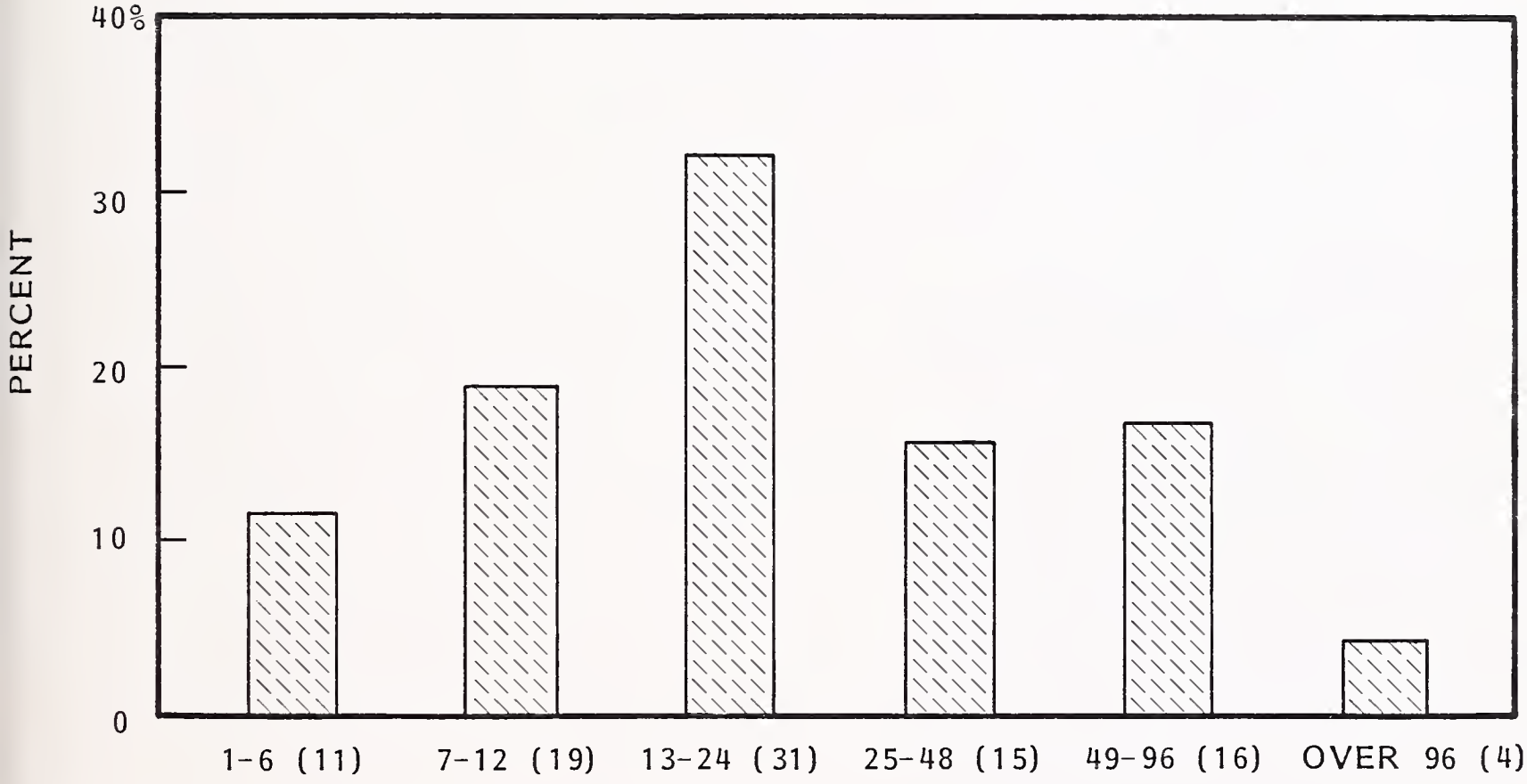
- Half of the respondents plan to use an IBM 3081 and one third of the planned 3081 users say it will effect their disaster recovery plans.

- Exhibit III-24 indicates desired access time in the event of a disaster. The peak time is 13-24 hours.

- Only six of 92 respondents were concerned about a vendor's Disaster Recovery Service site being located next to the vendor's internal data processing facility.

EXHIBIT III-24

RESPONDENTS' REQUIREMENT FOR ACCESS TIME TO
DISASTER RECOVERY SITES IN CASE OF A DISASTER



(NUMBER OF RESPONDENTS)

APPENDIX A: DEFINITIONS

APPENDIX A: DEFINITIONS

- Computer Size

  - Computer sites are analyzed by the largest computer at the site. Sizes and their equivalent are:

  - IBM 3033.

    . Amdahl V/7.

    . Amdahl V/8.

  - IBM 3032.

    . IBM 168.

    . Amdahl V/6.

    . ITEL AS/6.

    . ITEL AS/7000

  - IBM 3031.

    . IBM 158.

- ITEL AS/5.
- Amdahl V/5.
- ITEL AS/5000.
- ITEL 7031.

- DISASTER - Any event which results in an unexpected computer site shutdown such that processing must be done at another site.

- DISASTER RECOVERY - The activities necessary to process at another computer site due to the unexpected shutdown of the normal site.

- DISASTER RECOVERY FACILITIES - Any alternative which enables a user to do computer processing on short notice at a physical location other than where the workload is normally processed.

- DISASTER RECOVERY PLAN - A detailed, documented description of all of the resources, procedures and decisions required before, during and after a Disaster.

- DISASTER RECOVERY SERVICE (DRS) - A vendor-supplied facility which provides the user with physical access to hardware, software and supplies in the event of a Disaster. The vendor is compensated by the user, in advance, for guaranteeing the availability of such facilities. Examples of DRS are Vendor Hardware and Vendor Shell. (Using a remote job entry terminal to a vendor facility is not considered to be a DRS.)

- GUARANTEED ACCESS - The legal right to gain entrance to a Disaster Recovery Facility upon the occurrence of a Disaster.

- GEOGRAPHIC AREAS - Groups of states, or sub-groups for purposes of classifying and analyzing information for this report.

INF

- Southern California - South of San Luis Obispo.

- Northern California - San Luis Obispo and north.

- Other - Texas, Illinois, Colorado.

- IBM COMPATIBLE - Computer mainframes manufactured by firms other than IBM, but which will execute IBM-developed systems software. Examples are computers marketed by Amdahl, Itel and Control Data (Omega series).

- INTERNAL BACKUP - Another site owned by the Respondent's organization, which can serve as a Disaster Recovery Facility. This site can be Computer Ready Space only ("Company Shell") or it can have on-site hardware ("Company Hardware").

- MULTIPLE SITES - An organization which has two or more computer sites, each of which has at least one Model 148 or larger.

- RESPONDENT - Firm participating in this survey. When the "number of respondents" or "percentage of respondents" term is used in this report, the calculation is based on the number of answers to that particular question.

- SERVICE BUREAU - A Disaster Recovery Facility in which an arrangement is made with a computer services vendor to process some or all of the user's workload. Access to the facility is usually not guaranteed. The vendor does not actively market this type of processing as a Disaster Recovery Service.

- SHELL - See Computer Ready Space.

- SINGLE SITE - A firm which has only one computer site with a Model 3031 or larger computer.

- TOP COMPUTER EXECUTIVE - The highest level full-time data processing manager in the organization.

- VENDOR HARDWARE - A Disaster Recovery Service with on-site hardware.

- VENDOR SHELL - A Disaster Recovery Service with Computer Ready Space only. No on-site hardware is present.

APPENDIX B: COMMENTS BY RESPONDENTS ABOUT DISASTER RECOVERY SERVICE VENDORS

APPENDIX B: COMMENTS BY RESPONDENTS ABOUT DISASTER RECOVERY SERVICE VENDORS

Litton Mellonics

- "All right - costly."
- "Can provide for most of our needs - can't provided sorts and they don't have enough printing capacity though."
- "Very expensive. Locations not yet set. Feel they were just checking the level of interest."
- "Pretty good. Overall price is pretty high, though."
- "It is a local firm."
- "Spoke with them about six months ago. They are not yet established."
- "Amount of equipment and people needed is expensive and almost prohibitive."
- "They were proposing a service and we felt reasonably comfortable with them. We heard a lot from them last summer, but not recently."

- "I don't know if they know what the hell they are doing. I sent someone to a presentation and that is the impression he got."

Sunguard

- "Pretty good, can use facilites up to 12 months."
- "Offered a shell."
- "Not local (that is two years away). They look very good - they offer both vendor hardware and shell."
- "Front runner before Comdisco entered market; less compatible and more expensive."
- "Expensive. Amount of equipment and people needed is expensive and almost prohibitive."
- "Not local."
- "Expensive, but good concept."
- "Expensive for services offered."
- "Looked pretty good, more expensive than we were willing to go."
- "Expensive."
- "Could not provide for our data processing needs adequately."
- "Have been approached by Sun but did not feel prices were as competitive as DPS and consulting services were not available."

- "In Philadelphia - heard they were planning to expand, but don't know when they will."

- "Also considered shell concept and mutual aid agreement - felt vendor hardware and Sunguard were best for us."

- "Pretty good - extremely expensive, 50K just to get in."

- "Pretty good, but we have 20 lines and they are Philadelphia. They are expensive."

- "Felt we would be subsidizing their own processing."

- "Most have good plans. Very expensive. Too far away. To do adequate testing they would have to have the same setup as us. So we have decided to save our money and protect what we have."

- "Have just begun to look at vendor."

- "Would only provide for about 25% of our processing needs."

- "Have considered other vendors but Sunguard has been highly recommended by some members of the Bay Area User Group and Pete Marwick & Mitchell, the company's consulting firm."

- "I couldn't couple their offerings with our needs."

- "I think what they are attempting to do is good - if it were done more on a regional basis. Another negative is that it is somewhat costly for what they are providing. You pay for the guarantee plus when the disaster happens."

- "Are a large company in this area, that's why we know them. Don't know the rest by name" (did hear other names at the conference he attended).

- "Too far way. Was able to provide telecommunications facilities."

Data Processing Security

- "Shell concept and this vendor less expensive - others are much too costly."
- "Took seminar from."
- "Heard they have been trying to come up with something but haven't been successful."
- "Price satisfactory, but services not sufficient for our needs."
- "Liked, little cheaper - they provide equipment shell."
- "Too expensive."
- "Is strongly considering/leaning toward DPS. Has the best prices and excellent consulting service."
- " 'The rock' in Dallas - they want 40 customers - that's too many people using one facility."
- "Good company, but out of reach for us."
- "During the initial period a lot of time is involved in just setting up - during this time the DP functions are not covered."
- "Toured facility and listened to their horror stories."
- "Has a comprehensive plan. Could be a possible alternative to proposed contractual agreement."

Com Disco

- "We have just begun to look. They would provide high-speed lines."
- "Has a service which helps to develop a disaster plan."
- "But would be hard to move all our data to Chicago."
- "Compatible with their equipment, knowledgeable of our needs, less expensive."
- "Good service."

Martin Marietta

- "Can't remember anything about them."
- "Looks like they can do the job. Location is a problem."
- "We already use some of their software."
- "Expensive. Amount of equipment and people needed is expensive and almost prohibitive."
- "Primarily concerned with batch processing; probably would arrange for teleprocessing; shell only; distant sites; shared with others on first come/first served basis.
- "Haven't looked at much."
- "Too expensive. Location too far away."

APPENDIX C: PROSPECTS FOR DISASTER RECOVERY SERVICE

APPENDIX C: PROSPECTS FOR DISASTER RECOVERY SERVICE

BASIC-FOUR CORPORATION
14101 Myford Road
Tustin, CA 92680

GLENDALE FEDERAL SAVINGS & LOAN ASSOCIATION
2710 Winona Avenue
Burbank, CA 91504

MAGNAVOX COMPANY
2829 Maricopa Street
Torrance, CA 90503

PUREX INDUSTRIES
5101 Clark Avenue
Lakewood, CA 90712

FREMONT INDEMNITY COMPANY
1709 West Eighth Street
Los Angeles, CA 90017

DENNY'S, INC.
16420 Valley View
La Mirada, CA 90637

CROWN ZELLERBACH CORPORATION
One Bush Street
San Francisco, CA 94104

VALLEY NATIONAL BANK OF ARIZONA
P.O. Box 71
Phoenix, AZ 85001

FAIRCHILD CAMERA AND INSTRUMENT
CORPORATION
450 National Avenue
Mountain View, CA 94042

ARIZONA BANK
2727 South 48th Street
Tempe, AZ 85282

GENERAL DYNAMICS
5001 Kearney Villa Road
San Diego, CA 92138

RALPH M. PARSONS
100 West Walnut
Pasadena, CA 91124

HOME FEDERAL SAVINGS AND LOAN
701 Broadway
San Diego, CA 92101

SOUTHERN CALIFORNIA EDISON
P.O. Box 800
Rosemead, CA 91770

UNITED AIRLINES
5350 S. Valencia Way
Englewood, CO 80110

FARMERS INSURANCE GROUP
4680 Wilshire Blvd.
Los Angeles, CA 90005

CALIFORNIA FIRST BANK
1450 Second Avenue
San Diego, CA

TIME INCORPORATED
541 N. Fairbanks Court
Chicago, IL 60611

ZENITH RADIO CORPORATION
1900 Austin Blvd.
Chicago, IL 60639

AMERICAN EXPRESS
2423 East Lincoln
Phoenix, AZ 85416

AIRESEARCH MANUFACTURING COMPANY
111 South 34th
Phoenix, AZ 85034

UCLA HOSPITAL
10833 Leconte - Room AV 310
Los Angeles, CA 90024

SAN BERNARDINO COUNTY
111 East Mill Street
San Bernardino, CA 92415

NATIONAL STEEL SHIPBUILDING COMPANY
P.O. Box 80278
San Diego, CA 92138

GIBRALTER SAVINGS AND LOAN
9111 Wilshire Boulevard
Beverly Hills, CA 90210

AIRBORNE FREIGHT CORPORATION
190 Queen Anne Avenue North
Seattle, WA 98111

PENZOIL COMPANY
Penzoil Place
P.O. 2967
Houston, TX 77001

SECURITY PACIFIC NATIONAL BANK
611 North Brand Blvd.
Glendale, CA 91203

SOUTHERN CALIFORNIA GAS
1801 South Atlantic
Monterey Park, CA 91754

PACIFIC MUTUAL LIFE INSURANCE
700 Newport Center Drive
Newport Beach, CA 92660

SAFECO INSURANCE COMPANY
13640 Roscoe Boulevard
Panorama City, CA 91409

MCGRAW-HILL INC.
Del Monte Research Park
Monterey, CA 93940

TITLE INSURANCE AND TRUST COMPANY
6300 Wilshire
Los Angeles, CA 90048

GTE SYLVANIA INC.
P.O. Box 188
Mountain View, CA 94040

VARIAN ASSOCIATES
611 Hansen Way
Palo Alto, CA 94305

ATLANTIC RICHFIELD COMPANY
645 South Mariposa
Los Angeles, CA 90005

BLUE CROSS OF CALIFORNIA
21555 Oxnard
Woodland Hills, CA 91367

TRANSAMERICA
1150 Olive
Los Angeles, CA 90015

ITEL CORPORATION
55 Francisco Street
Second Floor
San Francisco, CA 94133

INP

APPENDIX D: UNIQUE PERIPHERAL REQUIREMENTS

APPENDIX D: UNIQUE PERIPHERAL REQUIREMENTS

- "Would need a lot of 300 megabyte disk storage - which is our key peripheral."
- "Mass storage - but thought they might be able to it on real DASD."
- "A Honeywell Page Printing System."
- "IBM 3050s and 3040s plus numerous terminals."
- "3033 and 3050 disk drives plus other PCMs."
- "COM 10."
- "1287 Optical Reader."
- "120 3340 disks."
- "3800 Printer."
- "You name it, we have it."
- "Laser printer."
- "Honeywell page printer."

- "3890 check printer."
- "3800 printer. Connect to Wilcom network (R.J. Reynolds)."
- "Possibly a high-speed printer (3800)."
- "Require 3350s."

APPENDIX E: SURVEY QUESTIONNAIRE

CATALOG NO. YDRP[ ][ ]

DISASTER RECOVERY SERVICES

1. How many IBM 3033's or plug compatible equivalents do you have at your main location?, and at any other locations?

	Location	Number of IBM 3033's or equivalent
Main Site, Site 1	_____ (7)	_____ (11)
Site 2	_____ (8)	_____ (12)
Site 3	_____ (9)	_____ (13)
Site 4	_____ (10)	_____ (14)

A. If these are not IBM 3033's, what are they?

	Number
Amdahl V/7	_____ (15)
Amdahl V/8	_____ (16)
NAS AS8000	_____ (17)
NAS AS9000	_____ (18)
Other _____	_____ (19)
_____	_____ (20)

B. If no IBM 3033/s or equivalent. Thank you and goodby.

For this study, a DISASTER is defined as:

"Any event which results in an unexpected computer site shutdown such that processing must be done at another site"

2. A. Do you now have a backup arrangement for your main data center in the event of a disaster?

[CIRCLE NUMBERS]	Now	Plan	Months to Change
1. None	1 (21)	1 (28)	(35)
2. Internal backup with multiple computer sites	2 (22)	2 (29)	(36)
3. Vendor Hardware	3 (23)	3 (30)	(37)
4. Vendor Shell	4 (24)	4 (31)	(38)
5. Arrangement with Service Bureau	5 (25)	5 (32)	(39)
6. Mutual Aid Agreement with other users	6 (26)	6 (33)	(40)
7. Other _____	7 (27)	7 (34)	(41)

B. Do you have PLANS to change this arrangement?

Yes-1

No -2 (42)

If yes, to what, when?
[Answer goes to 2]

C. Why do you plan to change?

_____(43)

_____

INPU

IF APPLICABLE:

D. Name and location of Disaster Recovery Service:

Name		Location	
_____	(44)	_____	(48)
_____	(45)	_____	(49)
_____	(46)	_____	(50)
_____	(47)	_____	(51)

E. Name and locations of mutual back-up associates:

Name		Location	
_____	(52)	_____	(56)
_____	(53)	_____	(57)
_____	(54)	_____	(58)
_____	(55)	_____	(59)

3. How satisfied are you with your current arrangement? (Rate 1-10 with 10 high)

Rating: _____ (60)

Why? _____ (61)

_____

_____

_____

4. What vendors did/would you consider to provide Disaster Recovery Service?

Vendor	Comments
_____(62)	_____(66)
	_____
	_____
_____(63)	_____(67)
	_____
	_____
_____(64)	_____(68)
	_____
	_____
_____(65)	_____(69)
	_____
	_____

5. How did you learn about these?

_____(70)

_____

_____

6. How important are the following vendor characteristics? (Scale 1-10; High:10)

- Experience in Disaster Recovery _____ (71)
- Price _____ (72)
- Financial Stability _____ (73)
- Location _____ (74)
- Currently available facilities _____ (75)
- Existence of demonstration facility _____ (76)
- Commitment to Disaster Recovery _____ (77)
- Dedicated to service _____ (78)
- Other _____ _____ (79)

A. What terms and conditions are important in a Disaster Recovery Service contract?

_____(80)

_____(81)

_____(82)

7. How much would/does your company spend per year to guarantee the availability of Disaster Recovery facilities?

$_____(83) [If no idea-offer $10,000, $30,000, $60,000, $100,000]

A. How was this amount determined?

_____

_____

_____

_____

8. What pricing features of Disaster Recovery services do you especially like or dislike? Why?

_____(84)

_____(85)

_____(86)

_____

_____

9. How would you like to see Disaster Recovery Systems priced?

_____(87)

_____(88)

_____(89)

_____

_____

10. Who (by title) initiated your organization's interest in Disaster Recovery?

A. Why were they interested

		WHY	INIT	EVAL	DECIDE
1.	Auditors - external				
2.	Auditors - internal				
3.	Customers - external	(90)	(94)	(98)	(102)
4.	Customers - internal DP users				
5.	Experienced disaster first hand	(91)	(95)	(99)	(103)
6.	Government regulators				
7.	Industry trend	(92)	(96)	(100)	(104)
8.	Insurance rate decrease				
9.	Legal liability of board	(93)	(97)	(101)	(105)
10.	Press coverage				
11.	Other _____				

B. Who (by title) would have the evaluation responsibility in selecting your disaster recovery resources?

C. Who (by title) would have the decision responsibiiity for acquiring disaster recovery resources?

	Initiated	Evaluation	Decision
1. Assistant DP Manager			
2. Audit Committee			
3. Auditors - external			
4. Auditors - internal			
5. Board of directors			
6. Chairman of the board			
7. Communications manager			
8. Customers: external			
9. Customers: internal			
10. DP manager			
11. DP security manager			
12. Director of MIS			
13. Facilities Manager			
14. General Manager			
15. Government regulators			
16. Operations Manager			
17. President			
18. Senior Vice President			
19. Vice-President Finance			
20. Vice-President-Planning & Control			
21. Other _____			

11. How much time elapsed/will elapse between the initial decision to consider a Disaster Recovery System and the point of signing up?

_____Months (106)

12. Do you plan to use an IBM 3081 or equivalent in your operation?

Yes-1

No -2 _____(107)

A. If yes, will that effect your plans? How?

Yes-1

No -2 _____(108)

_____

_____

_____

_____

13. How important is the location of the Disaster Recovery Site (rate 1-10, with 10 most important)? _____ (109)

A. What is the minimum distance it should be from the user site?

_____ Miles (110)

B. What is the maximum?

_____ Miles (111)

14. How fast would you require access to the Disaster Recovery site in the event of a disaster, recognizing that faster access could cost more?
_____hours (112)

15. Approximately how much office space - in square feet would you require at the Disaster Recovery site?

_____ Square feet (113)

16. Do you depend on teleprocessing in your data processing installation?

Yes-1

No -2 _____(114)

A. Would replicating this from a disaster recovery center be practical?

Yes-1

No -2 _____(115)

Why?

_____(116)

_____(117)

_____(118)

B. Would dial-up 4800 baud service be adequate for your transmission needs in an emergency?

Yes-1

No -2 _____(119)

If no: What would you require? _____BAUD (120)

17. Do you have unique peripherals (as mass storage) that would be required at a disaster recovery site?

Yes-1

No -2 _____(121)

A. Describe:

_____

_____

_____

18. Please rate the following factors in terms of their importance to your disaster recovery plans and requirements - (on a scale of 1-10, with 10 most important)

- Teleprocessing capability at Disaster Recovery site _____ (122)
- Guaranteed access time _____ (123)
- Price _____ (124)
- Office space availability _____ (125)
- Halon fire retardent system _____ (126)
- Independent power supply system _____ (127)
- Expert outside consulting regarding disaster plan _____ (128)

A. What else is critical?

_____ (129)

_____ (130)

_____

19. Would you be concerned if the Disaster Recovery Service vendor had an existing data processing facility adjacent to the Disaster Recovery Service site?

Yes-1

No -2 _____ (131)

A. If yes, why?

_____

_____

_____

_____

_____

20. How many times per year would you expect to perform backup testing?

_____ Per year (132)

21. Which potential disasters concern you most in terms of the need for a Disaster Recovery System?

DO NOT FURNISH LIST, LIST FIRST THREE MENTIONS

1. Brown out	_____	8. Hurricane	_____	☐ (133)
2. Chemical Spill	_____	9. Nuclear event	_____	☐ (134)
3. Computer Failure	_____	10. Sabotage	_____	☐ (135)
4. Earthquake	_____	11. Strike	_____	
5. Explosion	_____	12. Tornado	_____	
6. Flood	_____	13. Vandalism	_____	
7. Fire	_____	14. Plane	_____	
		15. Other_____	_____	

DEFINITION - DISASTER RECOVERY PLAN:

"A detailed, documented description of all the resources, procedures and decisions required before, during and after a disaster"

22. Do you have a Disaster Recovery Plan?

Yes-1

No -2 _____(136)

If no, why?

_____(137)

_____(138)

If yes . . ., in your Disaster Recovery Plan:

1. Are personnel identified as to function, responsibility and the procedures they are to follow?

Yes-1

No -2 _____(139)

2. Are some jobs identified as critical, and are (these jobs scheduled)?

Yes-1

No -2 _____(140)

3. Is there a list of equipment required?

Yes-1

No -2 _____(141)

4. Are the data entry and report distribution functions covered?

Yes-1

No -2 _____(142)

5. Has the plan been tested?

Yes-1

No -2 _____(143)

6. Do you think your plan would work at an acceptable level?

Yes-1

No -2 _____(144)

B. If no, why? _____(145)

_____(146)

23. INTERVIEWER

Rate sophistication/knowledge level of interviewee relating to Disaster Recovery:

1-10 _____ (147)

Why?

_____

_____

_____

_____

APPENDIX F: REVISED PAGE ONE OF QUESTIONNAIRE

DISASTER RECOVERY SERVICES

1. How many large mainframe computers do you have at your main location, and at any other location?

LOCATION

MAIN SITE, 1 _____ (7)

SITE, 2 _____ (8)

SITE, 3 _____ (9)

SITE, 4 _____ (10)

COMPUTERS

3033 _____ (11) AT SITE 1

3033 _____ (12) SITE 2

3033 _____ (13) SITE 3

3033 _____ (14) SITE 4

A. IF NOT IBM

AMDAHL V/7 _____ (15)

AMDAHL V/8 _____ (16)

NAS AS 8000 _____ (17)

NAS AS 9000 _____ (18)

OTHER _____ _____ (19)

OTHER _____ _____ (20)

AMDAHL V/6 _____ (148)

B. IBM OTHER THAN 3033

3032 _____ (149)

3031 _____ (150)

168 _____ (151)